Data Validation Checklist
Semivolatile Organic Analyses

Project:	35TH Avenue Superfund Site	Project No:	15268508.20000
Laboratory:	TestAmerica – Tampa, FL	Job ID.:	680-87447-2
Method:	SW-846 8270C Low-Level (PAH)	Associated Samples:	Refer to **Attachment A** (Sample Summary)
Matrix:	Soil and water	Date(s) Collected:	02/12/2013
Reviewer:	Jane Lindsey	Date:	03/05/2013
Concurrence[1]:	Carol Lovett, Sarah Choyke	Date:	03/28/2013

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?	✓			There was a discrepancy between the COC record and bottle label concerning 680-87447-30. The Sample ID was listed on the COC record as CV0971AG-GS, while it was presented on the bottle's label as CV0971AJ-GS. The laboratory logged in the sample per the bottle label. The sample jar for CV0971AI-GS (680-87447-29) was received cracked; the laboratory transferred the sample to a new jar. J/UJ-Flag all PAH results.	J, UJ
4. Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Were holding times met (≤7 and 14 days from collection to extraction for aqueous and solid samples, respectively; ≤40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	✓				
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8. Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.			✓		

[1] Independent technical reviewer

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
9. Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10. Were target analytes detected in the method blank?		✓			
11. Were target analytes detected in equipment/rinsate blanks?		✓		PAHs were not detected during the analysis of rinsate blank 021213-RB-Shovel (680-87447-31).	
12. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.	✓			According to the QAPP, a rinsate blank is to be collected after each decontamination event, which occurs once per week per the client. A rinsate blank (021213-RB-Shovel) was collected during the week of 02/11/2013. The rinsate blank was analyzed for PAHs under this Test America Job ID.	
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)			✓	Blank contamination does not exist.	
14. Is a field duplicate associated with this Job?	✓			CV0971P-CSD (680-87447-23) is a field duplicate of CV0971P-CS (680-87447-22	
15. Was precision deemed acceptable as defined by the project plans?		✓		Refer to **Attachment B** (Field Duplicate Evaluation)	J
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270C) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? • Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. • An initial calibration is to be associated with each sample analysis. • A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument.	✓			• Initial Calibration: 01/07/2013, instrument BSMC5973 • ICV: 01/07/2013 @ 17:31 • CCV: 02/20/2013 @ 14:21 • Initial Calibration: 01/07/2013, instrument BSMD5973 • ICV 01/07/2013 @ 13:20 • CCV 02/20/2013 @ 14:01 • CCV 02/21/2013 @ 11:57	
19. Were calibration results within laboratory/project specifications?	✓				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
• ICAL (Criteria: ≤15 mean %RSD with individual CCC %RSD ≤30 (≤50% for poor performers), OR r≥0.995, OR r^2≥0.99, and RRF ≥0.050 (≥0.010 for poor performers)): o If %RSD>15 (>50% for poor performers), or r <0.995, or r^2 <0.995, then J-flag positive results and UJ-flag non-detects o If mean RRF <0.050 (<0.010 for poor performers), then J-flag positive results and R-flag non-detects • ICV and CCV (Criteria: ≤20%D (≤50% for poor performers) and RF ≥0.050 (≥0.010 for poor performers)): o If %D>20 (>50% for poor performers), then J-flag positive results and UJ-flag non-detects o If RF <0.050 (<0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds					
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J-flag positive results when %R >Upper Control Limit (UCL) and J/R-flag results when %R <Lower Control Limit (LCL).	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J-flag positive results and UJ-flag non-detects		✓		Water, LCS/LCSD 660-134642: • Benzo(g,h,i)perylene @ 39%RPD (≤35). Rinsate blank result qualified with UJ. • Dibenzo(a,h)anthracene @ 39%RPD (≤35). Rinsate blank result qualified with UJ. Although the RPD (34%) between LCS and LCSD results met the control limit (≤35%) for indeno(1,2,3-cd)pyrene, an asterisk was inappropriately applied to the rinsate sample result. The "asterisk" has been removed from indeno(1,2,3-cd)pyrene result reported for the rinsate blank.	UJ
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	✓			• Soil Prep Batch 134632: 680-87447-24(CV0971Q-CS), MS/MSD • Water Prep Batch 134642: 680-87447-31 (021213-RB-Shovel), MS only due to sample volume limitation.	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
25. Were MS/MSD recoveries within laboratory/project specifications? *Only QC results for project samples that are reported under this Job ID are evaluated.* • If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. • If either MS or MSD recovery meets control limits, qualification of data is not warranted. • MS and MSD %R<10: J and R Flag positive and ND results, respectively • MS and MSD %R >10 and <LCL: J-Flag positive and UJ-flag non-detect results • MS and MSD R% >UCL (or 140): J-Flag positive results		✓		021213-RB-Shovel (680-87447-31): Benzo(g,h,i)perylene MS @ 21%R (26-130). Result qualified with UJ.	UJ
26. Were laboratory criteria met for precision during the MS/MSD analysis? O*nly QC results for project samples that are reported under this Job ID are evaluated.* • If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. • If %RPD > UCL, J-flag positive result and UJ-flag non-detect result	✓				
27. Were surrogate recoveries within lab/project specifications? • If %R <10, then J-flag positive and R-flag non-detect associated sample results • If %R >UCL, then J-flag positive results • %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results • If 1 %R >UCL and 1 %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results	✓			.	
28. Were internal standard (IS) results within lab/project specifications? • If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results • If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results • If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect	✓				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
results • If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R-flag associated data. • The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met.					
29. Were lab comments included in report?	✓			Refer to **Attachment C** (Case Narrative)	
Comments: The data validation was conducted in accordance with the *Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1* (OTIE, October 2012). The data review process was modeled after the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review* (EPA, October 1999) and *USEPA CLP NFG for Low Concentration Organic Methods Data Review* (EPA, June 2001). Sample results have been qualified based on the results of the data review process (**Attachment D**). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.					

DV Flag Definitions:

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
R The sample results are unusable. The analyte may or may not be present in the sample.
U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A

SAMPLE SUMMARY

Sample Summary

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87447-2
SDG: 68087447-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87447-22	CV0971P-CS	Solid	02/12/13 10:46	02/14/13 10:18
680-87447-23	CV0971P-CSD	Solid	02/12/13 10:48	02/14/13 10:18
680-87447-24	CV0971Q-CS	Solid	02/12/13 10:45	02/14/13 10:18
680-87447-25	CV0971R-CS	Solid	02/12/13 10:49	02/14/13 10:18
680-87447-26	CV0971S-CS	Solid	02/12/13 10:54	02/14/13 10:18
680-87447-27	CV0971AG-GS	Solid	02/12/13 10:28	02/14/13 10:18
680-87447-28	CV0971AH-GS	Solid	02/12/13 10:34	02/14/13 10:18
680-87447-29	CV0971AI-GS	Solid	02/12/13 10:38	02/14/13 10:18
680-87447-30	CV0971AJ-GS	Solid	02/12/13 10:43	02/14/13 10:18
680-87447-31	021213-RB-Shovel	Water	02/12/13 12:36	02/14/13 10:18

ATTACHMENT B

FIELD DUPLICATE EVALUATION

Evaluation of Field Duplicate Results **Attachment B**

Analyte	CV0971P-CS (680-87447-22)		RL	CV0971P-CSD (680-87447-23)		RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthene	260		160	140		130	µg/kg	725	NA	120	290	None, absolute difference ≤ 2x Avg RL
Acenaphthylene	30	J	63	28	J	52	µg/kg	287.5	NA	2	115	None, absolute difference ≤ 2x Avg RL
Anthracene	990		13	560		11	µg/kg	60	**55**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(a)anthracene	4100		13	2400		10	µg/kg	57.5	**52**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(a)pyrene	4100		17	2200		14	µg/kg	77.5	**60**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(b)fluoranthene	6800		77	3100		16	µg/kg	232.5	**75**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(g,h,i)perylene	2500		32	1400		26	µg/kg	145	**56**	NA	NA	**J/UJ-flag, RPD > 50%**
Benzo(k)fluoranthene	2100		13	1600		10	µg/kg	57.5	**27**	NA	NA	None, RPD ≤ 50%
Chrysene	4200		14	2200		12	µg/kg	65	**63**	NA	NA	**J/UJ-flag, RPD > 50%**
Dibenzo(a,h)anthracene	720		32	360		26	µg/kg	145	**67**	NA	NA	**J/UJ-flag, RPD > 50%**
Fluoranthene	12000		130	5900		100	µg/kg	575	**68**	NA	NA	**J/UJ-flag, RPD > 50%**
Fluorene	230		32	130		26	µg/kg	145	NA	**100**	**58**	**J/UJ-flag, absolute difference > 2x Avg RL**
Indeno(1,2,3-cd)pyrene	2400		32	1100		26	µg/kg	145	**74**	NA	NA	**J/UJ-flag, RPD > 50%**
1-Methylnaphthalene	60	J	63	64		52	µg/kg	287.5	NA	4	115	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	66		63	73		52	µg/kg	287.5	NA	7	115	None, absolute difference ≤ 2x Avg RL
Naphthalene	86		63	78		52	µg/kg	287.5	NA	8	115	None, absolute difference ≤ 2x Avg RL
Phenanthrene	4300		13	2300		10	µg/kg	57.5	**61**	NA	NA	**J/UJ-flag, RPD > 50%**
Pyrene	8700		130	4500		100	µg/kg	575	**64**	NA	NA	**J/UJ-flag, RPD > 50%**

Note: If the analyte was not detected, then the cell was left blank.

µg/kg - micrograms per kilogram
J - Estimated value
NA - Not applicable
RL - Reporting limit
RPD - Relative percent difference
UJ - Not detected and the limit is estimated

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT C

CASE NARRATIVE

Job ID: 680-87447-2

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-87447-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 02/14/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.2 C.

SEMIVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL

Samples CV0971P-CS (680-87447-22), CV0971P-CSD (680-87447-23), CV0971Q-CS (680-87447-24), CV0971R-CS (680-87447-25), CV0971S-CS (680-87447-26), CV0971AG-GS (680-87447-27), CV0971AH-GS (680-87447-28), CV0971AI-GS (680-87447-29) and CV0971AJ-GS (680-87447-30) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C. The samples were prepared on 02/19/2013 and analyzed on 02/20/2013 and 02/21/2013.

Samples CV0971P-CS (680-87447-22)[4X], CV0971P-CSD (680-87447-23)[4X] and CV0971R-CS (680-87447-25)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the Semivolatile Organic Compounds by GCMS - Low Level analyses.

All quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample 021213-RB-Shovel (680-87447-31) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 02/19/2013 and analyzed on 02/20/2013.

Benzo[g,h,i]perylene and Dibenz(a,h)anthracene exceeded the rpd limit for LCSD 660-134642/3-A.

Benzo[g,h,i]perylene recovered outside the recovery criteria for the MS of sample 021213-RB-ShovelMS (680-87447-31) in batch 660-134680.

No other difficulties were encountered during the semivolatiles analysis.

All other quality control parameters were within the acceptance limits.

ATTACHMENT D

QUALIFIED SAMPLE RESULTS

Client Sample ID: CV0971P-CS — **Lab Sample ID: 680-87447-22**
Date Collected: 02/12/13 10:46 — Matrix: Solid
Date Received: 02/14/13 10:18 — Percent Solids: 62.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	260		160	32	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Acenaphthylene	30	J	63	7.9	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Anthracene	990	J	13	6.7	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Benzo[a]anthracene	4100	J	13	6.2	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Benzo[a]pyrene	4100	J	17	8.3	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Benzo[g,h,i]perylene	2500	J	32	7.0	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Benzo[k]fluoranthene	2100		13	5.7	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Chrysene	4200	J	14	7.1	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Dibenz(a,h)anthracene	720	J	32	6.5	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Fluorene	230	J	32	6.5	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Indeno[1,2,3-cd]pyrene	2400	J	32	11	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
1-Methylnaphthalene	60	J	63	7.0	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
2-Methylnaphthalene	66		63	11	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Naphthalene	86		63	7.0	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Phenanthrene	4300	J	13	6.2	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*78*		*30 - 130*	*02/19/13 14:49*	*02/21/13 00:42*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	6800	J	77	39	ug/Kg	☼	02/19/13 14:49	02/21/13 14:35	4
Fluoranthene	12000	J	130	25	ug/Kg	☼	02/19/13 14:49	02/21/13 14:35	4
Pyrene	8700	J	130	23	ug/Kg	☼	02/19/13 14:49	02/21/13 14:35	4

Client Sample ID: CV0971P-CSD — **Lab Sample ID: 680-87447-23**
Date Collected: 02/12/13 10:48 — Matrix: Solid
Date Received: 02/14/13 10:18 — Percent Solids: 75.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140		130	26	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Acenaphthylene	28	J	52	6.5	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Anthracene	560	J	11	5.5	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Benzo[a]anthracene	2400	J	10	5.1	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Benzo[a]pyrene	2200	J	14	6.8	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Benzo[b]fluoranthene	3100	J	16	7.9	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Benzo[g,h,i]perylene	1400	J	26	5.7	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Benzo[k]fluoranthene	1600		10	4.7	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Chrysene	2200	J	12	5.8	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Dibenz(a,h)anthracene	360	J	26	5.3	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Fluorene	130	J	26	5.3	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Indeno[1,2,3-cd]pyrene	1100	J	26	9.2	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
1-Methylnaphthalene	64		52	5.7	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
2-Methylnaphthalene	73		52	9.2	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Naphthalene	78		52	5.7	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Phenanthrene	2300	J	10	5.1	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*62*		*30 - 130*	*02/19/13 14:49*	*02/21/13 01:00*	*1*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample ID: CV0971P-CSD
Date Collected: 02/12/13 10:48
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-23
Matrix: Solid
Percent Solids: 75.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**5900**	J	100	21	ug/Kg	☼	02/19/13 14:49	02/21/13 14:57	4
Pyrene	**4500**	J	100	19	ug/Kg	☼	02/19/13 14:49	02/21/13 14:57	4

Client Sample ID: CV0971Q-CS
Date Collected: 02/12/13 10:45
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-24
Matrix: Solid
Percent Solids: 64.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	160	U	160	31	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Acenaphthylene	**14**	**J**	63	7.8	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Anthracene	**41**		13	6.6	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Benzo[a]anthracene	**210**		13	6.1	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Benzo[a]pyrene	**190**		16	8.1	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Benzo[b]fluoranthene	**310**		19	9.6	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Benzo[g,h,i]perylene	**120**		31	6.9	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Benzo[k]fluoranthene	**100**		13	5.6	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Chrysene	**200**		14	7.1	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Dibenz(a,h)anthracene	**35**		31	6.4	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Fluoranthene	**430**		31	6.3	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Fluorene	**13**	**J**	31	6.4	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Indeno[1,2,3-cd]pyrene	**110**		31	11	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
1-Methylnaphthalene	**34**	**J**	63	6.9	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
2-Methylnaphthalene	**40**	**J**	63	11	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Naphthalene	**48**	**J**	63	6.9	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Phenanthrene	**200**		13	6.1	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Pyrene	**390**		31	5.8	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*77*		*30 - 130*	*02/19/13 14:49*	*02/21/13 01:18*	*1*

Client Sample ID: CV0971R-CS
Date Collected: 02/12/13 10:49
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-25
Matrix: Solid
Percent Solids: 76.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	520	U	520	100	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Acenaphthylene	**54**	**J**	210	26	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Anthracene	**97**		43	22	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Benzo[a]anthracene	**300**		41	20	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Benzo[a]pyrene	**280**		54	27	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Benzo[b]fluoranthene	**440**		63	32	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Benzo[g,h,i]perylene	**200**		100	23	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Benzo[k]fluoranthene	**160**		41	19	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Chrysene	**320**		47	23	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Dibenz(a,h)anthracene	**66**	**J**	100	21	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Fluoranthene	**570**		100	21	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Fluorene	**26**	**J**	100	21	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Indeno[1,2,3-cd]pyrene	**190**		100	37	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4

Client Sample ID: CV0971R-CS — **Lab Sample ID: 680-87447-25**
Date Collected: 02/12/13 10:49 — **Matrix: Solid**
Date Received: 02/14/13 10:18 — **Percent Solids: 76.2**

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	51	J	210	23	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
2-Methylnaphthalene	66	J	210	37	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Naphthalene	67	J	210	23	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Phenanthrene	380		41	20	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Pyrene	450		100	19	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*76*		*30 - 130*	*02/19/13 14:49*	*02/20/13 18:10*	*4*

Client Sample ID: CV0971S-CS — **Lab Sample ID: 680-87447-26**
Date Collected: 02/12/13 10:54 — **Matrix: Solid**
Date Received: 02/14/13 10:18 — **Percent Solids: 71.7**

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	28	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Acenaphthylene	140		55	6.9	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Anthracene	170		12	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Benzo[a]anthracene	330		11	5.4	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Benzo[a]pyrene	360		14	7.2	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Benzo[b]fluoranthene	680		17	8.4	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Benzo[g,h,i]perylene	280		28	6.1	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Benzo[k]fluoranthene	220		11	5.0	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Chrysene	430		12	6.2	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Dibenz(a,h)anthracene	85		28	5.7	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Fluoranthene	420		28	5.5	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Fluorene	22	J	28	5.7	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Indeno[1,2,3-cd]pyrene	270		28	9.8	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
1-Methylnaphthalene	130		55	6.1	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
2-Methylnaphthalene	160		55	9.8	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Naphthalene	120		55	6.1	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Phenanthrene	210		11	5.4	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Pyrene	510		28	5.1	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*82*		*30 - 130*	*02/19/13 14:49*	*02/20/13 18:33*	*1*

Client Sample ID: CV0971AG-GS — **Lab Sample ID: 680-87447-27**
Date Collected: 02/12/13 10:28 — **Matrix: Solid**
Date Received: 02/14/13 10:18 — **Percent Solids: 70.3**

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	35	J	140	28	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Acenaphthylene	19	J	57	7.1	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Anthracene	120		12	6.0	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Benzo[a]anthracene	460		11	5.5	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Benzo[a]pyrene	480		15	7.4	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Benzo[b]fluoranthene	740		17	8.7	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Benzo[g,h,i]perylene	310		28	6.3	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1

Client Sample ID: CV0971AG-GS
Date Collected: 02/12/13 10:28
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-27
Matrix: Solid
Percent Solids: 70.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	280		11	5.1	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Chrysene	560		13	6.4	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Dibenz(a,h)anthracene	91		28	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Fluoranthene	1100		28	5.7	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Fluorene	27	J	28	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Indeno[1,2,3-cd]pyrene	310		28	10	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
1-Methylnaphthalene	37	J	57	6.3	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
2-Methylnaphthalene	45	J	57	10	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Naphthalene	43	J	57	6.3	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Phenanthrene	480		11	5.5	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Pyrene	870		28	5.3	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*85*		*30 - 130*	*02/19/13 14:49*	*02/20/13 18:55*	*1*

Client Sample ID: CV0971AH-GS
Date Collected: 02/12/13 10:34
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-28
Matrix: Solid
Percent Solids: 61.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	61	J	160	32	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Acenaphthylene	19	J	65	8.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Anthracene	230		14	6.8	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Benzo[a]anthracene	750		13	6.3	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Benzo[a]pyrene	700		17	8.4	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Benzo[b]fluoranthene	1100		20	9.8	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Benzo[g,h,i]perylene	420		32	7.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Benzo[k]fluoranthene	350		13	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Chrysene	780		15	7.3	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Dibenz(a,h)anthracene	130		32	6.6	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Fluoranthene	1800		32	6.5	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Fluorene	58		32	6.6	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Indeno[1,2,3-cd]pyrene	420		32	11	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
1-Methylnaphthalene	28	J	65	7.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
2-Methylnaphthalene	29	J	65	11	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Naphthalene	36	J	65	7.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Phenanthrene	940		13	6.3	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Pyrene	1400		32	6.0	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*74*		*30 - 130*	*02/19/13 14:49*	*02/20/13 19:18*	*1*

Client Sample ID: CV0971AI-GS
Date Collected: 02/12/13 10:38
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-29
Matrix: Solid
Percent Solids: 65.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	170		150	30	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1

Client Sample ID: CV0971AI-GS

Lab Sample ID: 680-87447-29

Date Collected: 02/12/13 10:38
Matrix: Solid
Date Received: 02/14/13 10:18
Percent Solids: 65.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	**37**	**J**	60	7.5	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Anthracene	**570**		13	6.3	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Benzo[a]anthracene	**1600**		12	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Benzo[a]pyrene	**1400**		16	7.8	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Benzo[b]fluoranthene	**2100**		18	9.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Benzo[g,h,i]perylene	**800**		30	6.6	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Benzo[k]fluoranthene	**850**		12	5.4	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Chrysene	**1800**		13	6.7	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Dibenz(a,h)anthracene	**250**		30	6.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Fluoranthene	**3900**		30	6.0	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Fluorene	**160**		30	6.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Indeno[1,2,3-cd]pyrene	**780**		30	11	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
1-Methylnaphthalene	**82**		60	6.6	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
2-Methylnaphthalene	**97**		60	11	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Naphthalene	**110**		60	6.6	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Phenanthrene	**2200**		12	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Pyrene	**3000**		30	5.5	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*66*		*30 - 130*	*02/19/13 14:49*	*02/20/13 19:41*	*1*

Client Sample ID: CV0971AJ-GS

Lab Sample ID: 680-87447-30

Date Collected: 02/12/13 10:43
Matrix: Solid
Date Received: 02/14/13 10:18
Percent Solids: 69.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	28	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Acenaphthylene	**24**	**J**	57	7.1	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Anthracene	**66**		12	6.0	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Benzo[a]anthracene	**260**		11	5.5	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Benzo[a]pyrene	**250**		15	7.4	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Benzo[b]fluoranthene	**410**		17	8.6	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Benzo[g,h,i]perylene	**160**		28	6.2	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Benzo[k]fluoranthene	**120**		11	5.1	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Chrysene	**290**		13	6.4	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Dibenz(a,h)anthracene	**48**		28	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Fluoranthene	**530**		28	5.7	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Fluorene	**17**	**J**	28	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Indeno[1,2,3-cd]pyrene	**150**		28	10	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
1-Methylnaphthalene	**47**	**J**	57	6.2	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
2-Methylnaphthalene	**51**	**J**	57	10	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Naphthalene	**46**	**J**	57	6.2	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Phenanthrene	**280**		11	5.5	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Pyrene	**440**		28	5.2	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*67*		*30 - 130*	*02/19/13 14:49*	*02/20/13 20:03*	*1*

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87447-2
SDG: 68087447-2

Client Sample ID: 021213-RB-Shovel
Date Collected: 02/12/13 12:36
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-31
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2.0	U	2.0	0.50	ug/L		02/19/13 16:30	02/20/13 15:55	1
Acenaphthylene	0.99	U	0.99	0.25	ug/L		02/19/13 16:30	02/20/13 15:55	1
Anthracene	0.20	U	0.20	0.075	ug/L		02/19/13 16:30	02/20/13 15:55	1
Benzo[a]anthracene	0.20	U	0.20	0.050	ug/L		02/19/13 16:30	02/20/13 15:55	1
Benzo[a]pyrene	0.20	U	0.20	0.056	ug/L		02/19/13 16:30	02/20/13 15:55	1
Benzo[b]fluoranthene	0.20	U	0.20	0.050	ug/L		02/19/13 16:30	02/20/13 15:55	1
Benzo[g,h,i]perylene	0.50	U UJ	0.50	0.099	ug/L		02/19/13 16:30	02/20/13 15:55	1
Benzo[k]fluoranthene	0.20	U	0.20	0.056	ug/L		02/19/13 16:30	02/20/13 15:55	1
Chrysene	0.20	U	0.20	0.068	ug/L		02/19/13 16:30	02/20/13 15:55	1
Dibenz(a,h)anthracene	0.20	U UJ	0.20	0.050	ug/L		02/19/13 16:30	02/20/13 15:55	1
Fluoranthene	0.50	U	0.50	0.053	ug/L		02/19/13 16:30	02/20/13 15:55	1
Fluorene	2.0	U	2.0	0.50	ug/L		02/19/13 16:30	02/20/13 15:55	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.050	ug/L		02/19/13 16:30	02/20/13 15:55	1
1-Methylnaphthalene	2.0	U	2.0	0.50	ug/L		02/19/13 16:30	02/20/13 15:55	1
2-Methylnaphthalene	2.0	U	2.0	0.50	ug/L		02/19/13 16:30	02/20/13 15:55	1
Naphthalene	2.0	U	2.0	0.25	ug/L		02/19/13 16:30	02/20/13 15:55	1
Phenanthrene	0.50	U	0.50	0.20	ug/L		02/19/13 16:30	02/20/13 15:55	1
Pyrene	0.50	U	0.50	0.088	ug/L		02/19/13 16:30	02/20/13 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*77*		*30 - 130*	*02/19/13 16:30*	*02/20/13 15:55*	*1*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample ID: CV0971P-CS — **Lab Sample ID: 680-87447-22**
Date Collected: 02/12/13 10:46 — Matrix: Solid
Date Received: 02/14/13 10:18 — Percent Solids: 62.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	260		160	32	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Acenaphthylene	30	J	63	7.9	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Anthracene	990	J	13	6.7	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Benzo[a]anthracene	4100	J	13	6.2	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Benzo[a]pyrene	4100	J	17	8.3	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Benzo[g,h,i]perylene	2500	J	32	7.0	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Benzo[k]fluoranthene	2100		13	5.7	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Chrysene	4200	J	14	7.1	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Dibenz(a,h)anthracene	720	J	32	6.5	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Fluorene	230	J	32	6.5	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Indeno[1,2,3-cd]pyrene	2400	J	32	11	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
1-Methylnaphthalene	60	J	63	7.0	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
2-Methylnaphthalene	66		63	11	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Naphthalene	86		63	7.0	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1
Phenanthrene	4300	J	13	6.2	ug/Kg	☼	02/19/13 14:49	02/21/13 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*78*		*30 - 130*	*02/19/13 14:49*	*02/21/13 00:42*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	6800	J	77	39	ug/Kg	☼	02/19/13 14:49	02/21/13 14:35	4
Fluoranthene	12000	J	130	25	ug/Kg	☼	02/19/13 14:49	02/21/13 14:35	4
Pyrene	8700	J	130	23	ug/Kg	☼	02/19/13 14:49	02/21/13 14:35	4

Client Sample ID: CV0971P-CSD — **Lab Sample ID: 680-87447-23**
Date Collected: 02/12/13 10:48 — Matrix: Solid
Date Received: 02/14/13 10:18 — Percent Solids: 75.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140		130	26	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Acenaphthylene	28	J	52	6.5	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Anthracene	560	J	11	5.5	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Benzo[a]anthracene	2400	J	10	5.1	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Benzo[a]pyrene	2200	J	14	6.8	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Benzo[b]fluoranthene	3100	J	16	7.9	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Benzo[g,h,i]perylene	1400	J	26	5.7	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Benzo[k]fluoranthene	1600		10	4.7	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Chrysene	2200	J	12	5.8	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Dibenz(a,h)anthracene	360	J	26	5.3	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Fluorene	130	J	26	5.3	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Indeno[1,2,3-cd]pyrene	1100	J	26	9.2	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
1-Methylnaphthalene	64		52	5.7	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
2-Methylnaphthalene	73		52	9.2	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Naphthalene	78		52	5.7	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1
Phenanthrene	2300	J	10	5.1	ug/Kg	☼	02/19/13 14:49	02/21/13 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*62*		*30 - 130*	*02/19/13 14:49*	*02/21/13 01:00*	*1*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample ID: CV0971P-CSD
Date Collected: 02/12/13 10:48
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-23
Matrix: Solid
Percent Solids: 75.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**5900**	J	100	21	ug/Kg	☼	02/19/13 14:49	02/21/13 14:57	4
Pyrene	**4500**	J	100	19	ug/Kg	☼	02/19/13 14:49	02/21/13 14:57	4

Client Sample ID: CV0971Q-CS
Date Collected: 02/12/13 10:45
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-24
Matrix: Solid
Percent Solids: 64.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	160	U	160	31	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Acenaphthylene	**14**	**J**	63	7.8	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Anthracene	**41**		13	6.6	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Benzo[a]anthracene	**210**		13	6.1	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Benzo[a]pyrene	**190**		16	8.1	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Benzo[b]fluoranthene	**310**		19	9.6	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Benzo[g,h,i]perylene	**120**		31	6.9	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Benzo[k]fluoranthene	**100**		13	5.6	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Chrysene	**200**		14	7.1	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Dibenz(a,h)anthracene	**35**		31	6.4	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Fluoranthene	**430**		31	6.3	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Fluorene	**13**	**J**	31	6.4	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Indeno[1,2,3-cd]pyrene	**110**		31	11	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
1-Methylnaphthalene	**34**	**J**	63	6.9	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
2-Methylnaphthalene	**40**	**J**	63	11	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Naphthalene	**48**	**J**	63	6.9	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Phenanthrene	**200**		13	6.1	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1
Pyrene	**390**		31	5.8	ug/Kg	☼	02/19/13 14:49	02/21/13 01:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*77*		*30 - 130*	*02/19/13 14:49*	*02/21/13 01:18*	*1*

Client Sample ID: CV0971R-CS
Date Collected: 02/12/13 10:49
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-25
Matrix: Solid
Percent Solids: 76.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	520	U	520	100	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Acenaphthylene	**54**	**J**	210	26	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Anthracene	**97**		43	22	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Benzo[a]anthracene	**300**		41	20	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Benzo[a]pyrene	**280**		54	27	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Benzo[b]fluoranthene	**440**		63	32	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Benzo[g,h,i]perylene	**200**		100	23	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Benzo[k]fluoranthene	**160**		41	19	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Chrysene	**320**		47	23	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Dibenz(a,h)anthracene	**66**	**J**	100	21	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Fluoranthene	**570**		100	21	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Fluorene	**26**	**J**	100	21	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Indeno[1,2,3-cd]pyrene	**190**		100	37	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4

Client Sample ID: CV0971R-CS — **Lab Sample ID: 680-87447-25**
Date Collected: 02/12/13 10:49 — **Matrix: Solid**
Date Received: 02/14/13 10:18 — **Percent Solids: 76.2**

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	51	J	210	23	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
2-Methylnaphthalene	66	J	210	37	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Naphthalene	67	J	210	23	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Phenanthrene	380		41	20	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4
Pyrene	450		100	19	ug/Kg	☼	02/19/13 14:49	02/20/13 18:10	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*76*		*30 - 130*	*02/19/13 14:49*	*02/20/13 18:10*	*4*

Client Sample ID: CV0971S-CS — **Lab Sample ID: 680-87447-26**
Date Collected: 02/12/13 10:54 — **Matrix: Solid**
Date Received: 02/14/13 10:18 — **Percent Solids: 71.7**

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	28	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Acenaphthylene	140		55	6.9	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Anthracene	170		12	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Benzo[a]anthracene	330		11	5.4	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Benzo[a]pyrene	360		14	7.2	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Benzo[b]fluoranthene	680		17	8.4	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Benzo[g,h,i]perylene	280		28	6.1	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Benzo[k]fluoranthene	220		11	5.0	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Chrysene	430		12	6.2	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Dibenz(a,h)anthracene	85		28	5.7	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Fluoranthene	420		28	5.5	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Fluorene	22	J	28	5.7	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Indeno[1,2,3-cd]pyrene	270		28	9.8	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
1-Methylnaphthalene	130		55	6.1	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
2-Methylnaphthalene	160		55	9.8	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Naphthalene	120		55	6.1	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Phenanthrene	210		11	5.4	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1
Pyrene	510		28	5.1	ug/Kg	☼	02/19/13 14:49	02/20/13 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*82*		*30 - 130*	*02/19/13 14:49*	*02/20/13 18:33*	*1*

Client Sample ID: CV0971AG-GS — **Lab Sample ID: 680-87447-27**
Date Collected: 02/12/13 10:28 — **Matrix: Solid**
Date Received: 02/14/13 10:18 — **Percent Solids: 70.3**

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	35	J	140	28	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Acenaphthylene	19	J	57	7.1	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Anthracene	120		12	6.0	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Benzo[a]anthracene	460		11	5.5	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Benzo[a]pyrene	480		15	7.4	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Benzo[b]fluoranthene	740		17	8.7	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Benzo[g,h,i]perylene	310		28	6.3	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1

Client Sample ID: CV0971AG-GS
Date Collected: 02/12/13 10:28
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-27
Matrix: Solid
Percent Solids: 70.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	280		11	5.1	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Chrysene	560		13	6.4	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Dibenz(a,h)anthracene	91		28	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Fluoranthene	1100		28	5.7	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Fluorene	27	J	28	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Indeno[1,2,3-cd]pyrene	310		28	10	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
1-Methylnaphthalene	37	J	57	6.3	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
2-Methylnaphthalene	45	J	57	10	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Naphthalene	43	J	57	6.3	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Phenanthrene	480		11	5.5	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1
Pyrene	870		28	5.3	ug/Kg	☼	02/19/13 14:49	02/20/13 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*85*		*30 - 130*	*02/19/13 14:49*	*02/20/13 18:55*	*1*

Client Sample ID: CV0971AH-GS
Date Collected: 02/12/13 10:34
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-28
Matrix: Solid
Percent Solids: 61.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	61	J	160	32	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Acenaphthylene	19	J	65	8.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Anthracene	230		14	6.8	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Benzo[a]anthracene	750		13	6.3	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Benzo[a]pyrene	700		17	8.4	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Benzo[b]fluoranthene	1100		20	9.8	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Benzo[g,h,i]perylene	420		32	7.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Benzo[k]fluoranthene	350		13	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Chrysene	780		15	7.3	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Dibenz(a,h)anthracene	130		32	6.6	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Fluoranthene	1800		32	6.5	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Fluorene	58		32	6.6	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Indeno[1,2,3-cd]pyrene	420		32	11	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
1-Methylnaphthalene	28	J	65	7.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
2-Methylnaphthalene	29	J	65	11	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Naphthalene	36	J	65	7.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Phenanthrene	940		13	6.3	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1
Pyrene	1400		32	6.0	ug/Kg	☼	02/19/13 14:49	02/20/13 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*74*		*30 - 130*	*02/19/13 14:49*	*02/20/13 19:18*	*1*

Client Sample ID: CV0971AI-GS
Date Collected: 02/12/13 10:38
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-29
Matrix: Solid
Percent Solids: 65.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	170		150	30	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1

Client Sample ID: CV0971AI-GS

Lab Sample ID: 680-87447-29

Date Collected: 02/12/13 10:38
Matrix: Solid
Date Received: 02/14/13 10:18
Percent Solids: 65.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	**37**	**J**	60	7.5	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Anthracene	**570**		13	6.3	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Benzo[a]anthracene	**1600**		12	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Benzo[a]pyrene	**1400**		16	7.8	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Benzo[b]fluoranthene	**2100**		18	9.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Benzo[g,h,i]perylene	**800**		30	6.6	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Benzo[k]fluoranthene	**850**		12	5.4	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Chrysene	**1800**		13	6.7	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Dibenz(a,h)anthracene	**250**		30	6.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Fluoranthene	**3900**		30	6.0	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Fluorene	**160**		30	6.1	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Indeno[1,2,3-cd]pyrene	**780**		30	11	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
1-Methylnaphthalene	**82**		60	6.6	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
2-Methylnaphthalene	**97**		60	11	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Naphthalene	**110**		60	6.6	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Phenanthrene	**2200**		12	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1
Pyrene	**3000**		30	5.5	ug/Kg	☼	02/19/13 14:49	02/20/13 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*66*		*30 - 130*	*02/19/13 14:49*	*02/20/13 19:41*	*1*

Client Sample ID: CV0971AJ-GS

Lab Sample ID: 680-87447-30

Date Collected: 02/12/13 10:43
Matrix: Solid
Date Received: 02/14/13 10:18
Percent Solids: 69.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	28	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Acenaphthylene	**24**	**J**	57	7.1	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Anthracene	**66**		12	6.0	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Benzo[a]anthracene	**260**		11	5.5	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Benzo[a]pyrene	**250**		15	7.4	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Benzo[b]fluoranthene	**410**		17	8.6	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Benzo[g,h,i]perylene	**160**		28	6.2	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Benzo[k]fluoranthene	**120**		11	5.1	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Chrysene	**290**		13	6.4	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Dibenz(a,h)anthracene	**48**		28	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Fluoranthene	**530**		28	5.7	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Fluorene	**17**	**J**	28	5.8	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Indeno[1,2,3-cd]pyrene	**150**		28	10	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
1-Methylnaphthalene	**47**	**J**	57	6.2	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
2-Methylnaphthalene	**51**	**J**	57	10	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Naphthalene	**46**	**J**	57	6.2	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Phenanthrene	**280**		11	5.5	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1
Pyrene	**440**		28	5.2	ug/Kg	☼	02/19/13 14:49	02/20/13 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*67*		*30 - 130*	*02/19/13 14:49*	*02/20/13 20:03*	*1*

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87447-2
SDG: 68087447-2

Client Sample ID: 021213-RB-Shovel
Date Collected: 02/12/13 12:36
Date Received: 02/14/13 10:18

Lab Sample ID: 680-87447-31
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2.0	U	2.0	0.50	ug/L		02/19/13 16:30	02/20/13 15:55	1
Acenaphthylene	0.99	U	0.99	0.25	ug/L		02/19/13 16:30	02/20/13 15:55	1
Anthracene	0.20	U	0.20	0.075	ug/L		02/19/13 16:30	02/20/13 15:55	1
Benzo[a]anthracene	0.20	U	0.20	0.050	ug/L		02/19/13 16:30	02/20/13 15:55	1
Benzo[a]pyrene	0.20	U	0.20	0.056	ug/L		02/19/13 16:30	02/20/13 15:55	1
Benzo[b]fluoranthene	0.20	U	0.20	0.050	ug/L		02/19/13 16:30	02/20/13 15:55	1
Benzo[g,h,i]perylene	0.50	U UJ	0.50	0.099	ug/L		02/19/13 16:30	02/20/13 15:55	1
Benzo[k]fluoranthene	0.20	U	0.20	0.056	ug/L		02/19/13 16:30	02/20/13 15:55	1
Chrysene	0.20	U	0.20	0.068	ug/L		02/19/13 16:30	02/20/13 15:55	1
Dibenz(a,h)anthracene	0.20	U UJ	0.20	0.050	ug/L		02/19/13 16:30	02/20/13 15:55	1
Fluoranthene	0.50	U	0.50	0.053	ug/L		02/19/13 16:30	02/20/13 15:55	1
Fluorene	2.0	U	2.0	0.50	ug/L		02/19/13 16:30	02/20/13 15:55	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.050	ug/L		02/19/13 16:30	02/20/13 15:55	1
1-Methylnaphthalene	2.0	U	2.0	0.50	ug/L		02/19/13 16:30	02/20/13 15:55	1
2-Methylnaphthalene	2.0	U	2.0	0.50	ug/L		02/19/13 16:30	02/20/13 15:55	1
Naphthalene	2.0	U	2.0	0.25	ug/L		02/19/13 16:30	02/20/13 15:55	1
Phenanthrene	0.50	U	0.50	0.20	ug/L		02/19/13 16:30	02/20/13 15:55	1
Pyrene	0.50	U	0.50	0.088	ug/L		02/19/13 16:30	02/20/13 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*77*		*30 - 130*	*02/19/13 16:30*	*02/20/13 15:55*	*1*

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)